**PATENT** 

## PENDING CLAIMS AS AMENDED

Please amend the claims as follows:

- 1. (Previously Presented) A remote station apparatus comprising:
  - a quality measurement unit for iteratively measuring link quality of a communication link;
  - a quality message processing unit for generating a quality message and differential indicators based on the measured link quality and for generating a parity check corresponding to the quality message; and
  - a differential analyzer for determining changes in the measured link quality using the quality message and differential indicators.
- 2. (Original) The remote station of claim 1, wherein the link quality is measured as carrier to interference of a received signal.
- 3. (Original) The remote station of claim 2, wherein the quality measurement unit generates a quality metric, and wherein the remote station applies a sector cover to the quality metric.
- 4. (Previously Presented) In a wireless communication system, a method comprising: generating quality messages and differential indicators at a first frequency, the quality messages and differential indicators providing information on the quality of a communication link; and

generating a parity check for each of the quality messages.

5. (Currently Amended) The method of claim [[5]] 4, further comprising: generating differential indicators at a second frequency, the differential indicators

indicating changes in the quality of the communication link, wherein the second frequency is greater than the first frequency.

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- 6. (Original) The method of claim 5, wherein each quality message includes carrier to interference information of a received signal at a receiver.
- 7. (Original) The method of claim 4, wherein each differential indicator is at least one bit.
- 8. (Previously Presented) In a wireless communication system, a method comprising:
  estimating a channel condition over a first time window;
  comparing the estimated channel condition to a first threshold value;
  determining a transmission rate for transmission of quality messages and
  differential indicators based on the comparison;
  transmitting quality messages at the transmission rate; and
  transmitting differential indicators independently of quality messages.
- 9. (Original) The method as in claim 8, wherein the first time window is dynamically adjusted based on operation of the system.
- 10. (Original) The method as in claim 8, further comprising: calculating an average channel condition; and calculating variance of the channel condition.
- 11. (Previously Presented) A wireless apparatus, comprising:

means for estimating a channel condition over a first time window;
means for comparing the estimated channel condition to a first threshold value;
means for determining a transmission rate for transmission of quality messages and
differential indicators based on the comparison;

means for transmitting quality messages at the transmission rate; and means for transmitting differential indicators independently of quality messages.

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- 12. (Original) In a wireless communication system for processing voice communications and packet-switched communications, a base station comprising:
  - receive circuitry operative to receive signals on a reverse link, including a quality message with a parity check, and differential indicators, the quality message periodically providing a quality metric of a forward link, wherein the differential indicators track the quality metric between successive quality messages;
  - a memory storage unit operative to store a quality message received on the reverse link; and
  - a differential analyzer to update the quality message stored in the memory storage unit in response to the differential indicators and the parity check.
- 13. (Previously Presented) A wireless apparatus, comprising:

processing unit, operative for executing computer-readable instructions; and a memory storage unit adapted to store a plurality of computer-readable instructions for:

generating quality messages and differential indicators at a first frequency, the quality messages providing information on the quality of a communication link, wherein the differential indicators track a quality metric between successive quality messages; and generating a parity check for each of the quality messages.

14. (Original) The apparatus of claim 13, wherein the plurality of computer-readable instructions are further adapted for:

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generating differential indicators at a second frequency, the differential indicators indicating changes in the quality of the communication link, wherein the second frequency is greater than the first frequency.

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15. (Previously Presented) A wireless apparatus, comprising:

processing unit, operative for executing computer-readable instructions; and a memory storage unit adapted to store a plurality of computer-readable instructions for:

estimating a channel condition over a first time window;

comparing the estimated channel condition to a first threshold value;

determining a transmission rate for transmission of quality messages and differential indicators based on the comparison;

transmitting quality messages at the transmission rate; and transmitting differential indicators independently of quality messages.

16. (Previously Presented) In a wireless communication system, the wireless communication system supporting a plurality of carriers, a method comprising:

determining an average channel condition among the plurality of carriers;

comparing the average channel condition to a first threshold value;

determining a transmission rate for transmission of quality messages and differential indicators based on the comparison;

transmitting quality messages at the transmission rate; and transmitting differential indicators independently of quality messages.

- 17. (Original) The method as in claim 16, further comprising:
  - assigning a weight to each of the plurality of carriers, wherein the average channel condition is a weighted average.
- 18. (Previously Presented) A wireless apparatus, comprising:

processing unit, operative for executing computer-readable instructions; and a memory storage unit adapted to store a plurality of computer-readable instructions for:

determining a best channel condition associated with a first frequency; and

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generating a quality message, the quality message including a quality indicator and a frequency indicator, the frequency indicator identifying the first frequency; and generating differential indicators separately from the quality message.

19. (Original) The wireless apparatus as in claim 18, wherein the frequency indicator is a pointer to select the first frequency from a plurality of predetermined frequencies.

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